



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: August 26, 2020
Person Contacted: Nathan Cruz
NTSB Accident Number: ERA20LA287

Narrative:

Mr. Nathan Cruz was contacted by phone on August 20, 2020, at 0818 EDT. He was called at [REDACTED] and left a voice mail message. He was called again on August 21, 2020, at 1615 EDT, and left a voice mail message indicating that was my second phone call to him. He returned the call on August 22, 2020, at 0843 EDT. I spoke with him briefly and during that call he indicated he had spent some time with his family. A call was set for Monday, August 24, 2020, for a phone interview. He called on August 24, 2020, at 0913 EDT, from the same phone number. He provided an e-mail address of [REDACTED]

At the beginning of the interview he was advised that the NTSB is a federal agency mandated by Congress to investigate aircraft accidents, and NTSB has no authority to take any action against any individual. He was also informed that the purpose of an NTSB investigation is for safety only, and any person NTSB talks with has the right to representation; he agreed to the interview without representation.

He indicated that before the initial departure from the Groton-New London Airport (GON), Groton, Connecticut on the training flight, a complete preflight inspection of the airplane was performed, as well as complete engine run-ups before departure. The run-ups included cycling of the propellers of both engines. During the run-up the pilot-undergoing-instruction (PUI) would read aloud the checklist and perform each item while he monitored. The cycling of the propellers was performed three times for each propeller which was done at 1,800 rpm. He indicated that he did not detect any issue with either propeller at that time.

The training flight departed from GON about 1700 EDT, and flew direct to Bangor International Airport (BGR), Bangor, Maine, landing about 1915 EDT. No airwork was performed en route and each fuel selector was in the on position for the flight. There were no problems with the airplane or engines during that flight. After landing the fuel tanks were filled. While that

occurred he remained inside the fixed base operator (FBO) building. Before departure from BGR a preflight inspection of the airplane exterior was performed by the PUI and himself using the checklist. The check included a visual check of each fuel tank and both were verified to be full. No fuel contaminants were noted. After the engines were started they obtained their taxi clearance, taxied to the runway as directed by Federal Aviation Administration (FAA) air traffic control, and advised the controller they were ready to depart. No engine run-up was performed before departure.

The flight departed BGR between 1945 and 2000, or about sunset, with him in the right seat and the PUI in the left seat. The PUI flew to Augusta State Airport (AUG), Augusta, Maine, where he performed one touch-and-go (T&G) landing. That flight leg was about 30 minutes and each fuel selector was in the on position. He indicated that there were no problems with the airplane or engines during that flight. The PUI then flew to Portland International Jetport (PWM), Portland, Maine, where the PUI performed three T&G landings. The flight leg was about 1 hour and was flown with each fuel selector in the on position, and at this point of the conversation explained that the fuel selectors are positioned on the floor between the pilot and co-pilot seats. The positions are forward (on), middle (off), and aft (crossfeed). He indicated that there were no problems with the airplane or engines during that flight.

The PUI departed PWM and flew direct to GON. While en route no airwork was performed. They did have visual flight rules (VFR) flight following, and when near GON after visually spotting the airport beacon, they cancelled the flight following. Since the PUI needed night time, he decided they would do pattern work and would execute T&G landings. On the first approach they were on a left base leg to final of the airport traffic pattern for runway 23. The PUI performed a T&G landing, remained in the traffic pattern for the same runway and performed another T&G landing on runway 23. On the last circuit, everything was "OK" as the PUI climbed to traffic pattern altitude (TPA) of 1,000 ft mean sea level (msl), and turned crosswind and then downwind of the airport traffic pattern for runway 23. While on the downwind leg the PUI extended the flaps 10°, had the power set to 18 inches of mercury (inHg), the auxiliary fuel pumps on, and when abeam the approach end of runway 23 lowered the landing gear and began to descent. He went through the "GUMP" or gas, undercarriage, mixtures and propellers. The PUI began to descent and with the power set to 15 inHg, turned onto the base leg. He heard an engine sputter, he looked, then heard an engine sputter again. He said "my controls" and took the controls from the PUI. He kept the airplane under control and at a "reasonable airspeed" to maintain control. He did the emergency procedures consisting of pushing mixtures, propellers and throttles forward, and when he did so heard an engine respond, but noted he needed to add left rudder input using the dead-foot dead-engine, he confirmed the right engine was the suspect engine. After verifying he reduced the right throttle and there was no change in performance or sound. He retracted the flaps, but kept the landing gear extended. He pitched nose-down to increase airspeed, then attempted to climb but the airplane was not climbing. He decided to feather the right propeller, and placed the right mixture control to the idle cut-off position. He looked around, and noted he was "not getting the performance he needed." He knew the area because of his daytime flights around GON, and knew he could not go to the left because of train tracks. He flew towards a dark area, and knew there were houses underneath them. He found a dark spot, and flew towards it. He noted a street light to his right, and once he had better lighting he maneuvered for landing on the street. He spotted powerlines on the right side of the street, and

maneuvered to the left to avoid them. He flared, and impacted, though at the time he did not know what he hit. He and the PUI were wearing the seatbelt and shoulder harness; both were tight for each of them.

The following questions were asked:

Did he lose consciousness?

He was not aware the airplane came to rest. He noted it was loud and had a musty smell. He realized he was alive and started shouting for the PUI. He heard him respond, and he was at the back of the airplane trying to get out. The PUI screamed asking him how to get out of the airplane. He told him by the front door and to come forward, which he did. The PUI exited the airplane first, followed by himself. They fell into the house, and the PUI opened the front door of the house and they walked out of it outside.

What were his injuries?

He sustained a laceration to the right side of his head which required 6 staples. He also sustained other cuts and bruises; the other cuts did not require staples or sutures. They did a compound tomography (CT or CAT) scan of his head and neck and was cleared.

What were the injuries of the PUI?

He sustained a cut to his head and one knee that required sutures. He was not sure which knee.

Did the right propeller stop when the engine sputtered?

He did not believe so.

What was the airspeed and engine rpm when he feathered the right propeller?

He flies the airplane at 105 miles-per-hour (mph). He did not look at the engine rpm gauge. He did note that the left manifold pressure was high while the right manifold pressure was low. The dual tachometer is by the knees of the left seat occupant.

Describe how he moved the right propeller control?

He pulled the right propeller control to the feather position and the right mixture control to the idle cut-off position.

Did the right propeller feather?

He could not tell and did not look at the right propeller. He was too busy flying the airplane and looking for a place to land.

How much fuel was on-board at building impact?

They topped off before departure from BGR which gives 5 hours of endurance, and he estimated they were flying for about 3 hours, so there was plenty of fuel on-board.¹

Did he recall the airspeed when trying to maneuver for the street?

¹ He did not specify a value.

He did not recall but he was able to maintain positive aircraft control.

Did he give the PUI a simulated loss of engine power?

No.

Was he or the PUI video recording the flight?

No.

How many flight hours in that airplane?

The operator has 2 Piper PA-34-200 airplanes. In PA-34-200 he has about 443 hours, which is split between both of them.

Since flying that airplane, has he had any problems with the engines, and specifically the right engine?

No.

What is his total flight time?

About 1,545 hours.

Who is he employed by?

Upgrade, Inc. He has been an employee for about 1.5 years. He is not a contract employee. He actually gets a W2 form from them.

Does the operator maintain their airplanes well?

Yes, from what he sees. They are always on top of it from what he knows.

If there is a discrepancy how is that reported?

He would tell Ryan Gauthier verbally. Sometimes he will ask to put the discrepancy on a post-it note and give to the front desk.

How does the operator handle written discrepancies?

They use an APP called MyFBO scheduling. You can use that for formally documenting discrepancies.

Are you dissuaded from writing discrepancies?

No, I don't think so.

How many flight instructors are they at Upgrade, Inc?

5 including him. There is 1 other flight instructor named Joel who is authorized to fly the multi-engine aircraft.

When was his last flight in that airplane?

August 10th. It was a 2.5 hours long flight with a different student. There were no airframe or engine problems on that flight.

Is there any question I have not asked that you think is important?

No.

At the moment of the loss of right engine power what was the configuration of the engine controls?

Each mixture and propeller control were full forward, and each engine was at 15 inHg.

The call ended at 1009 EDT.

The digest was e-mailed to him for review on August 26, 2020. He replied on August 28, 2020, at 1414 EDT with comments that were incorporated into the narrative. The corrected digest was e-mailed to him on August 28, 2020.